

## FLORA

The flora of Watauga County is characteristic of the Southern Blue Ridge ecoregion, a biological and geological region that stretches from southwest Virginia to northern Georgia and which includes the easternmost tier of counties in Tennessee, the northwestern-most tier of counties in South Carolina, and all of North Carolina west of the eastern Blue Ridge Escarpment. The flora of Watauga County is more specifically that of the high "northern mountains" of North Carolina, an area that includes Ashe, Alleghany, Watauga, and Avery counties. The flora of the northern mountains contains greater numbers of species of northern distribution than any other area in the state. It is also important for Southern Appalachian endemic species, several of which occur at only a few sites in the world. Watauga County ranks 11th in the state in numbers of rare plant species, at 70. The rare plants include one fern, two clubmosses, 7 flowering plants, four liverworts, one lichen, and five mosses. A list of the rare plants appears in Table 3, with an explanation of ranks and status codes at the end of the table. Information on statewide distribution and habitats of rare plant species is contained in Amoroso (1999) or can be obtained from the NC NHP.

Two of the most significant areas in montane North Carolina are present in Watauga County: the Amphibolite Mountains Macrosite and Grandfather Mountain. These areas are comparable, in terms of rare species and intact natural community types, with other biodiversity hotspots such as Roan Mountain, the Black Mountains, and the Great Smoky Mountains.

The Watauga County parts of the Amphibolite Mountains Macrosite contain a total of 37 rare plant species. The high number of rare plants is largely due to the presence of intact, high elevation communities and nutrient-richness from abundant amphibolite rock. Long Hope Valley is the single most significant site in the Southern Appalachian region for populations of northern disjunct species. Long Hope Valley supports the largest, most pristine cluster of rare wetland habitats – Southern Appalachian Bogs and Swamp Forest-Bog Complexes – known anywhere else in the world. Watauga County parts of Long Hope Valley support northern disjuncts such as holy grass (*Hierochloa odorata*), buckbean (*Menyanthes trifoliata*), bog bluegrass (*Poa paludigena*), and the state's only population of the disjunct small bladderwort (*Utricularia minor*). It supports the state's only, and the world's southernmost, population of Canada yew (*Taxus canadensis*). The larger Macrosite supports three of four populations of long-stalked holly (*Ilex collina*) in the state, in the Long Hope Valley and Potato Hill Bogs and Seeps sites. Three of only nine state sites for the disjunct Schweinitz's ragwort (*Packera schweinitzianus*) are in the Macrosite, at Potato Hill/Rich Mountain Bald and Snake Mountain. The largest of only three extant populations of fringed gentian (*Gentianopsis crinita*) in North Carolina is present at Howards Creek Floodplain. The Macrosite contains two of only three documented populations of cranberry (*Vaccinium macrocarpon*) in the county. Potato Hill/Rich Mountain Bald supports important populations of very rare Southern Appalachian endemics such as spreading avens (*Geum radiatum*) and Roan Mountain bluet (*Houstonia montana*), both of which are Federally Endangered, and bent avens (*Geum geniculatum*), which is State Threatened and a Federal Species of Concern. Bent avens is known from only three sites in the world.